Claims

1. An amphibious vehicle adapted for use on land and on water including a vehicle body, and at least one trim tab, for adjusting the trim of the amphibious vehicle when it is in a marine mode, connected to the vehicle body and movable relative to the vehicle body between a retracted position and any one of a range of operational positions, and a control system for controlling the position of the or each trim tab including detecting means for detecting at least one mode change event and tab actuation means for moving the or each trim tab relative to the vehicle body, the control system being adapted to automatically move the or each trim tab either into the retracted position or into any one of a range of operational positions according to the mode change event detected.

2. An amphibious vehicle according to claim 1, in which the mode change event, detectable by the detecting means, is a first mode change event indicative of an onset of transition into a marine mode from a terrestrial mode and the control system is adapted to move the or each tab into one of a range of operational positions on detection of the said first mode change event.

3. An amphibious vehicle according to claim 1 or 2, in which the or a further mode change event, detectable by the detecting means, is a second mode change event indicative of an onset of transition into the terrestrial mode from a marine mode and the control system is adapted to automatically move the or each trim tab into the retracted position on detection of the said second mode change event.

4. An amphibious vehicle according to claim 2 or 3, in which the detecting means are capable of detecting selection of reverse propulsion in a marine mode, and the control system is adapted to automatically move the or each trim tab into the retracted position on detection of the selection of reverse propulsion.

5. An amphibious vehicle according to claim 4, in which the detecting means are capable of detecting a selection of forward propulsion when the vehicle is moving in the reverse

direction in a marine mode, and the control system is adapted to automatically move the or each trim tab into any one of a range of operational positions on the selection of forward propulsion.

6. An amphibious vehicle according to any of claims 1 to 5, in which the control system includes means for signalling an operator on detection of at least one event.

7. An amphibious vehicle according to any of claims 1 to 6, in which the vehicle has a set of wheels for supporting the vehicle when it is in terrestrial mode, and the control system includes means for retracting the set of wheels on detection of a transition into marine mode and means for deploying the set of wheels on detection of a transition into terrestrial mode.

8. An amphibious vehicle according to any of claims 1 to 7, in which the vehicle has a jet drive for propelling the vehicle when it is in marine mode and a reversing bucket, and the control system includes means for deploying the reversing bucket on detection of selection of reverse propulsion.

9. An amphibious vehicle substantially as hereinbefore described, with reference to and as illustrated in the accompanying drawings.

10. A method for controlling a trim tab system for an amphibious vehicle including the steps of automatically detecting a mode change event, and on detection of the mode change event automatically moving the or each trim tab either into the retracted position or into any one of a range of operational positions according to the event detected.

11. A method according to claim 10, in which the mode change event detected is an onset of transition into a marine mode from a terrestrial mode.

12. A method according to claim 10, in which, the mode change event detected is an onset of transition into a terrestrial mode from a marine mode.